

SECTION 4

Collection Element

Goal of This Planning Element:

To ensure the effective collection for the subsequent ten year plan period of solid waste, and recyclable and compostable materials within each community.

This section provides information on the current collection programs in the City of Atlanta for garbage, recyclables, yard trimmings, bulky waste, and beautification/common good services. Information on operations, collection schedules, and collection vehicles is also provided. In addition, each program is inventoried and assessed to determine its effectiveness. This section also includes needs and goals for operating an efficient collection system for the 10-year planning period.

4.1 Service Area and Existing Multi-Jurisdictional Agreements

The service area for the City of Atlanta is approximately 131.6 square miles located within the city limits. The City provides service to approximately 87,000 single-family and 33,600 multi-family residences. Land use within the City ranges from the highly urbanized Central Business District and other high-rise commercial areas to suburban residential areas. The 2000 Census population for the City was 416,474 and estimates prepared by the ARC indicate that the 2004 population for the City of Atlanta is approximately 434,900. Population trends indicate that the City is experiencing an approximate annual growth of 1.1 percent. From population estimates based on the ARC's 2003 forecasts and the City of Atlanta's Bureau of Planning 2004 forecast interpolations, the City will have an approximate population of 484,562 in 2015. The City will ensure that its collection systems are capable of handling increased population growth in the City.

The City of Atlanta does not currently have a multi-jurisdictional agreement with another governmental body for solid waste disposal.

4.2 Garbage Collection

Both the City of Atlanta and private haulers provide garbage collection in the City. SWS currently collects residential garbage, yard trimmings, garbage from City-owned buildings and facilities, some C&D debris, and performs various city beautification services (street sweeping, signage removal, etc.). The City contracts with a private company to provide curbside recycling collection. Private haulers collect commercial and industrial solid waste, C&D debris, and some multi-family residential garbage in the City.

4.2.1 City of Atlanta Garbage Collection

The City of Atlanta collects residential garbage from all of the single-family units and some of the multi-family units in the City. The City provides weekly semi-automated cart and

dumpster refuse collection to roughly 120,600 residential units. This includes approximately 95,400 single-family and multi-family dwelling units that receive cart collection and 25,200 multi-family dwelling units that receive dumpster service in the City. Most collections take place curbside, but the City also provides special backdoor services (at no additional charge) to residents who are certified to be handicapped or who pay a premium rate for the service.

The City also collects residential bulky waste items, such as mattresses, refrigerators, large appliances, furniture, and carpet. Bulky, oversize waste items are collected separately from residential garbage and only by appointment via a call-in system to schedule pickups.

In 2003, the City collected 146,101 tons of solid and bulky waste from residential units.

4.2.1.1 City of Atlanta Collection Operations (Existing Program)

The City operates from four substations located throughout the City. These substations, their number of routes, their current schedules, and the typical collection services they provide are presented in Table 4-1.

TABLE 4-1
City of Atlanta Solid Waste Collection Substations

Substation	Address	Times of Operation	Service
Lakewood	128 Claire Drive, SE Atlanta, GA	M-F, during the day 7:30 am – 4:00 pm	Curbside cart and dumpster refuse routes
Liddell	1540 Northside Drive, NW Atlanta, GA	M-Th, during the day 7:30 am – 4:00 pm	Curbside and backdoor cart refuse routes
Chester Avenue	315 Chester Avenue Atlanta, GA	Su-Sat, day and night 7:30 am – 4:00 pm; 7:30 pm – 4:00 am	City buildings and facilities routes & beautification
Maddox Park	1120 North Avenue Atlanta, GA	M-F, during the day 7:30 am – 4:00 pm	Curbside yard trimmings routes, bulky waste routes

Curbside refuse collection is conducted by two-person crews who operate rear-end loading packer trucks equipped with semi-automated cart tippers. Residents are to place all refuse in plastic bags and then place the bags into the City-provided 96-gallon containers (Herbie Curbies). Dumpsters at multi-family units are collected by two-person crews who operate front-end loading packer trucks. Backdoor refuse is collected by two-person crews with “mini-packer” 8-cubic-yard (CY) trucks.

Curbside and backdoor refuse collection operates weekly, Monday through Thursday. Dumpster refuse collection operates weekly, Monday, Tuesday, Thursday, and Friday. Typically for residential collection routes, crews begin their day at 7:30 a.m. and end their day at 4:00 p.m. On Fridays, residential refuse crews are also used to support bulky waste collection, yard trimmings collection, and other unscheduled refuse collections.

Bulky waste is collected separately from residential garbage by four- or five-person crews using rubber-tire loaders and either tandem or single-axle open dump trucks, or grapple (knuckleboom) trucks and dump trucks. Bulky waste is collected only by appointment via a call-in system to schedule pickups.

If collection vehicles cannot make it to the transfer stations at the end of the regular routes, the collection vehicles are parked at the substations and a “shuttle crew” will drive the vehicle to the transfer stations between 4:00 pm and 11:00 pm. The use of shuttle crews helps to reduce overtime, increases the amount of waste collected during the regular route, and helps alleviate problems caused by afternoon traffic. Shuttle crew employees are still full-time employees and help on other SWS tasks.

Collection operations for yard trimmings, City buildings and facilities refuse collection, and City beautification services are discussed in Sections 4.4.1, 4.5.1, and 4.5.2, respectively.

4.2.1.2 City of Atlanta Collection Vehicles (Existing Program)

The City’s solid waste collection fleet consists of compacting rear-end loaders, mini-packers, front-end loaders, knucklebooms, rubber-tire loaders, and dump trucks. The City also has spare vehicles to assist the fleet in the event of emergencies, maintenance protocols, or breakdowns. Table 4-2 provides a list of vehicles in the City’s fleet and the services they provide.

TABLE 4-2
City of Atlanta Solid Waste Collection Vehicles

Service	Vehicle	Minimum Required Number to Service Daily Routes
Residential Refuse Collection (Carts)	Rear-end Loader	40
Yard Trimmings Collection	Rear-end Loader	18
Residential Refuse Collection (Dumpsters)	Front-end Loader	6
City Buildings and Facilities Collection		
Residential Backdoor Refuse Collection (Carts)	Mini-Packer	6
Bulky Waste Collection	Knuckleboom	6
	Rubber-Tire Loader	1
	Dump Truck	15
City Beautification Services^a	Street Sweeper	14
	Refrigerator Truck ^b	2
	Vacuum Truck	2
	Street Flusher	1
	Rubber-Tire Loader	2
	Dump Truck	4

Notes:

^a The City also owns several lawnmowers and tractors for ROW cleanup.

^b For dead animals.

The City currently has a preventative maintenance program that provides maintenance service for the fleet every 60 days. The City also has a pre- and post-trip vehicle inspection program in place. In general, though, the City’s fleet is aging and many vehicles are in need

of replacement. The age of the fleet has an impact on the City's collection productivity and operating costs. Previous assessments of the City's solid waste collection fleet recommended the implementation of a maintenance and replacement schedule. However, implementation of this type of program requires a high capital investment that is currently not available. The City is currently in the process of initiating a vehicle maintenance and replacement program that will help reduce overall costs. Although a higher up-front capital outlay would be required for a vehicle fleet maintenance and replacement program, this initial investment would translate into more efficient operations and savings in maintenance and reparative costs in the long-term.

4.2.2 Private Garbage Collection

Private hauling companies collect some residential multi-family garbage, all commercial, non-residential solid waste, industrial sector solid waste, and C&D debris in the City of Atlanta. There are approximately 20,000 commercial establishments within the city limits, and approximately 182,936 employees worked within the City in 2000. It is estimated that in 2003, approximately 358,814 tons of commercial solid waste were collected by private waste companies in Atlanta for disposal.

The commercial waste stream consists of waste from facilities such as sports facilities, exhibit halls, convention centers, museums, theaters, shopping areas, airports, restaurants, nightclubs, hotels, colleges, universities, hospitals, offices, some multi-family residential housing, and many other retail, wholesale, and service establishments. Consequently, because of the large number of persons commuting into the City for work and recreation, it is expected that the commercial waste volume in Atlanta is higher on a per capita basis than in most communities.

To assess commercial solid waste in the City of Atlanta, the City conducted interviews with five major private haulers that collect waste from the city – United Waste Services, BFI, Waste Management, Rock-Tenn Recycling, and American Recycling Company. Collection information was obtained on a broad spectrum of commercial generators including large, medium and small-scale apartments, entertainment and convention facilities, restaurants, bars, grocery stores, retail stores, hotels, and high-rise office buildings. Small restaurants, bars, and large apartments had the highest frequency of waste collection—five to six times each week compared to once a month for small apartments. Convention facility waste collection varied with events and seasonal convention and sports schedules. On the average, waste collections at convention and sports facilities was collected every 2 weeks.

4.2.3 Assessment of Garbage Collection Programs

Information on the City's current solid waste collection operations was obtained through a benchmarking study conducted in 2004, titled "City of Atlanta Solid Waste Collection Efficiency and Benchmarking Analysis." The Executive Summary of this report is provided in Appendix B. This benchmarking study assessed the City's current operations and provided recommendations for improving the City's collection efficiency. Information from this study is summarized below.

4.2.3.1 City of Atlanta Collection Operations

Several single-family and multi-family units were observed setting out large amounts of garbage at the curb and not following the set-out limits established in the City's Solid Waste Ordinance, Section 130-37. Although residents were observed placing garbage at higher amounts than what is allowed in the ordinance, the set-out limits established in the ordinance itself are very high compared to requirements of most cities and private haulers in the U.S. The ordinance allows for a 90-gallon Herbie Curbie and an additional five bags of refuse to be placed at the curbside. Bulky waste items (such as mattresses, furniture, carpet, and other bulky items) were also observed to be mixed with yard waste. Therefore, the City will review the need to establish new, lower set-out limits, to educate residents on adhering to proper set-out limits, and to take necessary enforcement actions. The City's goal is to encourage compliance while ensuring customer satisfaction, controlling litter, and preventing illegal dumping.

The City's collection productivity and operational efficiency were also assessed in the benchmarking study. Recommendations that the City will consider or has already implemented include:

- Establishing a task pay system for City collection employees to provide incentive-based pay for performance
- Using dedicated collection crews working either four 10-hour days or five 8-hour days each week to achieve higher productivity
- Continuing the current financial management transition that SWS is undergoing, in order to help align costing data more accurately with the services provided

The City will also consider the feasibility of offering waste collection service to non-residential customers. Although non-residential and non-public waste collection is currently handled by private hauling companies, the City will determine if more cost-competitive, enhanced customer service, and more efficient collection can be provided by the City to non-residential customers.

The City is currently performing a cost of service and rate analysis study to determine fair and reasonable rates among the various services it provides. The study will be utilized in conjunction with this SWMP to help determine the true costs necessary to cover the new programs in this SWMP. The study will determine how the City can adequately fund these new programs while providing fair rates.

4.2.3.2 City of Atlanta Collection Vehicles

Based on the benchmarking study, the City of Atlanta's solid waste collection fleet is aging and many vehicles are in need of replacement. Also, in February 2004, United Parcel Service (UPS) performed an assessment of the fleet and recommended a vehicle maintenance and replacement schedule. Based on these recommendations, the City is currently in the process of initiating a vehicle maintenance and replacement program that will help reduce overall costs. A better preventative maintenance, pre- and post-trip inspection, and reparative schedule will also be implemented. Although a higher up-front capital outlay will be required for a vehicle fleet maintenance and replacement program, this initial investment

will translate into more efficient operations and savings in maintenance and reparative costs in the long-term.

The City has made several strides in improving its vehicle collection fleet. The City recently underwent a reorganization of procedures and responsibilities for its Motor Transport Division to improve efficiency. Also, the use of transfer stations, starting in 2005, has helped reduce the maintenance of the City's collection vehicles, due to reduced transportation time. By delivering collected waste to multiple transfer stations, instead of hauling waste long distances to a single landfill, the City has been able to reduce maintenance and wear on its vehicles. The more widely distributed transfer stations that the City can use, the more the City can reduce transportation and fuel costs and vehicle maintenance and wear, and can increase productivity and efficiency.

4.3 Recycling Collection

4.3.1 Residential Curbside Recycling Collection (Existing Program)

The City currently contracts with Dreamsane Recycling Group, Inc. (Dreamsane), a subsidiary of Dream Sanitation, to provide weekly residential curbside collection of recyclable materials. Dreamsane provides curbside recycling service to approximately 87,000 single-family residences. Recyclable materials are collected on the same day as residents' refuse collection, either Monday, Tuesday, Wednesday, or Thursday. The City currently bills residents for recycling collection as part of the garbage service fees.

Billing for recycling collection in the City is necessary to provide added convenience for recycling to residents and also to supplement Dreamsane's operating costs and revenue. The collection costs allow residents the ease and convenience of placing commingled recyclables at the curbside and having them picked up on a regular basis. By comparison, a drop-off center is less expensive to operate, though they do not typically have high recycling participation and add the inconvenience of having to transport recyclables to the site.

Dreamsane uses compartmentalized, trough-loading collection vehicles, with one to two operators per vehicle. Residents place commingled recyclable materials in a wheeled, 18-gallon recycling bin, which can be provided free of charge by request to the City or to Dreamsane, if residents do not currently have a bin. The recycling bins have detachable lids. The types of recyclable materials that are collected include newspaper, aluminum cans, glass bottles and jars, steel cans, plastics (PETE #1 and HDPE #2), mixed paper, office paper, junk mail, phone books, and boxboard. Corrugated cardboard is not collected curbside, but residents can bring cardboard to the recycling drop-off centers located at the Liddell and Lakewood substations. The City can also provide additional recycling bins to residents upon request.

The Dreamsane operator manually separates the paper from the other recyclable materials in the bin. Even though the collection vehicles are designed with several compartments, the driver only separates the items into two categories: (1) paper and (2) all other recyclables. Dreamsane then sorts the other commingled recyclable materials at their MRF. Detailed information on Dreamsane's MRF is provided in Section 3.3.2, Materials Recovery Facility.

4.3.2 Multi-Family Recycling Collection (Existing Program)

The City does not currently offer recycling services to the multi-family residences it serves. Due to the logistics and difficulty of collecting recyclables from multi-family residences, recycling service has traditionally been provided to single-family residences, since curbside recyclables are much easier and more efficient to collect. Single-family residents also pay a separate fee for the recycling service. The City, however, has heard several public comments desiring more recycling opportunities at multi-family units.

For residential multi-family housing, the City of Atlanta requires owners of any multi-family dwelling (including public housing, condominiums, and townhouses consisting of six or more living units) to provide containers for the collection of recyclables and to provide for their collection (Section 130-38(e) of the City of Atlanta Solid Waste Ordinance). Additionally, plans and specifications for new construction of multi-family housing units are required to set aside space for recycling containers on the premises (Section 130-38(f) of the City of Atlanta Solid Waste Ordinance).

Some private waste haulers provide recycling services for the multi-family complexes they service for garbage collection. These private waste haulers include United Waste Services, BFI, Waste Management, Rock-Tenn Recycling, and American Recycling Company. Table 4-3 indicates the types of recyclable materials that these haulers collect. Recycling data were not available from these private waste haulers.

TABLE 4-3
Private Waste Haulers That Provide Residential Recycling Service in City of Atlanta

Name of Hauler	Category of Service	Recycling Collection Frequency	Types of Recyclables Collected	Recycling Container Provided	Are Waste Audits Offered?
United Waste Services	Residential and Commercial	Determined by customer	Paper products, glass, plastic, and metal containers	Bins	Yes
BFI	Residential and Commercial	Determined by customer	Paper products, glass, plastic, metal containers, and wood pallets	Bins	Yes
Waste Management Inc.	Residential and Commercial	Determined by customer	Paper products, glass, plastic, and metal containers	Bins	Yes
Rock-Tenn Recycling	Residential and Commercial	Determined by customer	Paper products and metal cans	Bags, Bins, or Compactors	Yes
American Recycling Co.	Residential and Commercial	Determined by customer	Paper products and plastics	Bags, Bins, or Compactors	Yes

Source: City of Atlanta Commercial Solid Waste Management Assessment Report, 2004.

4.3.3 Commercial Business Recycling Collection (Existing Program)

The City of Atlanta does not mandate recycling collection at commercially owned buildings. However, any applicant for a non-residential building permit is required to submit plans to

the Commissioner of the City's DPW (or designee), identifying the locations of space designated for garbage and recycling containers. The approval of the Commissioner must be obtained prior to the issuance of a building permit by the Director of the City's Bureau of Buildings (Section 130-38(f) of the City of Atlanta Solid Waste Ordinance).

Twenty-three businesses in the City of Atlanta were surveyed as part of an assessment of commercial solid waste collection in the City. Of those 23 businesses, only 16 businesses collect recyclable materials. The Georgia Dome, a major event venue, collects aluminum cans, paper products, and wood pallets for recycling. The Georgia World Congress Center collects paper products generated from the executive business office for recycling, but does not provide recycling services for large conventions. The Georgia Institute of Technology has an Office of Solid Waste Management and Recycling, which operates a comprehensive recycling program. The program includes 24 outdoor collection sites and indoor recycling services for 80 academic and support buildings.

4.3.4 Other Recycling Programs (Existing Programs)

Several other recycling programs are in operation in the City, including drop-off centers and recycling in City-owned buildings. For more information on these programs, see Section 3.0, Waste Reduction Element.

4.3.5 Assessment of Recycling Collection Programs

4.3.3.1 Residential Curbside Recycling Collection

The City's current residential curbside recycling contractor collects a wide variety of recyclables; however, the City will review the current residential curbside recycling contract to determine if more commodities can be added. The City will also evaluate the curbside recycling program to ensure timely pickup of recyclables; provide adequate notification and education of set-out requirements; promote recycling education, public awareness, and marketing campaigns to the community and residents; evaluate the possibility of increasing the size of the recycling bins; add more drop-off recycling centers in the City; and improve customer service. The City will also identify legislative avenues to encourage participation in the recycling program in order to ensure that waste reduction goals are met. Many of the public comments on recycling in the City have addressed education, marketing, and convenience.

4.3.3.2 Multi-Family Recycling Collection

Although owners of a multi-family dwelling (including public housing, condominiums, and townhouses consisting of six or more living units) are required, by City Ordinance, to provide collection of recyclables, there has typically been low recycling participation at multi-family dwellings in the City of Atlanta. Several public comments have also expressed concern over lack of participation and recycling services at apartment and condominium complexes. The City will consider the following initiatives to increase recycling at multi-family residences:

- Evaluate reporting mechanisms to collect recycling data. This will help the City track its progress towards meeting the State's waste reduction goal and will also help provide an

enforcement component to ensuring that recycling opportunities are provided to multi-family residences.

- Re-evaluate the Solid Waste Ordinance.
- Consider offering recycling services through contractors to the multi-family residences the City serves.
- Evaluate legislative avenues to ensure that private waste haulers offer recycling options to the multi-family residences they serve.
- Address residents' concerns about the lack of recycling services at their complexes.
- Work with the City's Department of Planning and Community Development to consider specifying new recycling requirements for permit applications on new multi-family housing construction.
- Balance enforcement with education on recycling.

4.3.3.3 Commercial Business Recycling

Since it would be difficult for the City to regulate recycling in commercially owned buildings, the City will instead implement a program to collect more data on potential recyclables from commercially owned buildings and research feasible initiatives to encourage recycling programs at these buildings. The City will also evaluate providing more education, ideas, and opportunities to businesses to start a recycling program. The recycling information provided by the City will take into consideration small- and large-scale companies and the feasibility of implementing and operating a recycling program. For new construction of buildings, the City will work with the Department of Planning and Community Development to consider specifying new recycling requirements for permit applications. The City also plans to establish partnerships with the business community and will provide incentives to businesses in the forms of environmental stewardship awards and recognition, as well as potential financial incentives.

The Georgia Institute of Technology's Office of Solid Waste Management and Recycling operates a comprehensive recycling program. The City plans to establish a partnership with Georgia Tech and consider encouraging the use of Georgia Tech's program model for large office complexes and other schools and universities that do not currently have a recycling program.

The City will also encourage the Georgia World Congress Center and other conference centers to establish recycling and source reduction protocols for solid waste generated at their conventions. The City will establish partnerships with the City's conference centers and provide information on recycling and source reduction initiatives.

Because of the large number of commercial establishments within the City and the large number of persons commuting into the City for work and recreation, it is expected that the commercial waste volume in Atlanta is higher on a per capita basis than in most communities. Therefore, the City will research feasible initiatives to implement recycling programs at these commercial establishments and lead businesses to increase recycling efforts.

4.3.3.4 C&D Debris Recycling

There are currently no City of Atlanta regulations that require the recycling of C&D debris. A survey of solid waste entering all landfills in Georgia revealed that almost 12 percent of the total waste stream was C&D debris ("Non-MSW Survey Results," Georgia Department of Community Affairs, June 2002). The City of Atlanta and the majority of private waste haulers do not currently recycle the C&D debris they collect, but instead deliver it to C&D landfills. C&D debris disposal contributed over 95,000 tons to the City's waste stream in 2003, and most likely impacted the City's 11 percent per capita reduction. The City also recognizes that development in the City has increased over the past 10 years.

Therefore, the City will evaluate legislative actions to encourage C&D recycling through building permit requirements, will research educational initiatives to encourage contractors to recycle C&D debris, and will consider the use of financial incentives for companies to build and operate C&D Debris Recycling facilities that will serve the City.

4.4 Yard Trimmings Collection

4.4.1 Residential Curbside Yard Trimmings Collection (Existing Program)

Beginning in 1996, SWS began collecting yard trimmings separately from residential garbage. Yard trimmings are collected bi-weekly in bagged, contained, bundled, or loose curbside set-outs, by three-person crews using rear-end loader packer trucks. Yard trimmings are collected from single- and multi-family residential users, commercial, and industrial properties. All yard trimmings collection routes (18 per day) are dispatched from the Maddox Park substation.

Yard trimmings collections are scheduled to coincide with the refuse collection day. Monday and Tuesday's residential refuse routes have yard trimmings collected the 1st and 3rd week of each month. Wednesday and Thursday's residential refuse routes have yard trimmings collected the 2nd and 4th week of every month. Yard trimmings are collected during the day, Monday through Friday, during these scheduled weeks.

After being collected, yard trimmings are taken to a chipping, grinding, and staging area at the William B. Hartsfield Solid Waste Reduction Plant on James Jackson Parkway in Atlanta. The processed yard waste is then sent through a private contractor to various mills in the Southeast to be used as boiler fuel.

Large brush piles are collected separately from residential garbage by four- or five-person crews using rubber-tire loaders and either tandem or single-axle open dump trucks, or knuckleboom trucks and dump trucks. Large brush pile collection is conducted only by appointment via a call-in system to schedule pickups. Large brush piles are delivered to the William B. Hartsfield Solid Waste Reduction Plant where they are processed and delivered to various mills to be used as boiler fuel.

4.4.2 Assessment of Residential Yard Trimmings Collection Programs

From the benchmarking study, several single-family units were observed not following the yard trimmings set-out limits established in the City's Solid Waste Ordinance, Section 130-36(d) and (e). The ordinance requires yard trimmings to be placed in containers with a

maximum volume of 32 gallons per container or in kraft paper bags with a maximum weight of 50 pounds per bag. If yard trimmings cannot be containerized (such as tree branches, tree trunks, and heavy brush), these yard trimmings must be less than 6 inches in diameter and 4 feet in length. Several set-outs of yard trimmings were observed to be uncontainerized (that could have been containerized) and larger than the uncontainerized set-out limits specified in the ordinance. Bulky waste items (such as mattresses, furniture, carpet, and other bulky items) were also observed to be mixed with yard waste. If yard waste is improperly prepared or not separated, a minimum fine of \$50.00 or 20 hours of community service can be levied by the City (Sections 130-12(b)(1) and 130-36(i) of the Solid Waste Ordinance).

The City will re-evaluate the Solid Waste Ordinance to determine the need to establish new, lower set-out limits, to educate residents on adhering to proper set-out limits, and to take necessary enforcement actions. The current ordinance does not set a limit on the amount of uncontainerized yard trimmings that can be placed at the curb, even if the yard trimmings meet the “6 inches in diameter and 4 feet in length” set-out limit. The City’s goal in re-evaluating the set-out limits is to encourage compliance while ensuring customer satisfaction, controlling litter, and preventing illegal dumping.

Several public comments have also indicated a desire to have the frequency of yard trimmings pickup increased. The City will consider evaluating an increase in yard trimmings pickup frequency to once a week, instead of the current bi-weekly schedule. However, at this time, the City does not have the equipment and labor to increase pickup frequency. The City would require additional funding to accomplish this, and will evaluate purchasing additional equipment and possibly hiring temporary/seasonal labor (due to seasonal increases in yard trimmings generation). Better adherence to yard trimmings set-out limits established in the Solid Waste Ordinance will also help the City in accommodating a weekly pickup frequency, since the City will be able to collect yard trimmings more efficiently. When yard trimmings are uncontainerized or are larger than the required collection dimensions, the City must take time to ensure these yard trimmings can fit into the packer trucks.

4.5 Non-Traditional Solid Waste Collection Services

4.5.1 City-Owned Buildings and Facilities Collection (Existing Program)

The City of Atlanta provides dumpster collection from roughly 70 City-owned buildings. Refuse containers at city buildings range from single 2-CY dumpsters to several 8-cubic-yard dumpsters at a single location.

There is one nightly city building front-end load refuse route, which is dispatched from the Chester Avenue substation. Crews begin their day at 7:30 p.m. and end their day at 4:00 a.m. City buildings are serviced 7 days per week by 2-person crews using a front-end loader truck. Collection days vary for different buildings; some have daily collection, while others have weekly collection.

4.5.2 City Beautification and Common Good Services (Existing Program)

The City of Atlanta has historically provided and continues to provide a range of other special solid waste collection services to maintain a clean and aesthetically pleasing City. These beautification and common good services include:

- Street basket collection on selected City streets
- Street sweeping
- Vacant lot cleanup by the City's Trash Troopers
- Dead animal collection
- Removal of illegal signage
- ROW mowing by the City's Trash Troopers

The City uses a separate crew from the residential refuse, yard trimmings, bulky waste, and City buildings collection routes to perform City beautification services. Street basket collection operates 7 days a week, day and night; street sweeping occurs during the day 5 days a week, and at night for 7 days a week; vacant lot cleanup and ROW mowing occur during the day, 5 days a week; dead animal collection occurs during the day, 6 days a week; and signage removal operates during the day, 5 days a week. The types of vehicles used to perform beautification services include street sweepers, refrigerator trucks for dead animal collection, open top dump trucks, rubber-tire loaders, vacuum trucks, and street flushers for washing down streets.

4.5.3 Assessment of City Beautification and Common Good Services Programs

Based on the benchmarking study results, the City will evaluate the current routes for City building collection and determine if route efficiency can be improved. Currently, these routes are conducted separately from the other solid waste collection services; therefore, the City will determine if it may be more efficient to couple the City building routes with current multi-family dumpster collection routes.

The City will continue to provide beautification and common good services in order to ensure that Atlanta maintains its status as a clean and healthy city. The City will also perform a cost of service and rate analysis study to develop fair and reasonable rates for customers. For City building collection and City beautification services, this cost of service study is especially important in determining if these services are being adequately funded by the appropriate funding mechanisms. The City is also currently undergoing a financial management transition, which will help align costing data more accurately with the services provided.

4.6 Illegal Dumping/Littering

4.6.1 Inventory of Chronic Problem Areas

The City of Atlanta keeps a current database on chronic illegal dumping problem areas that the City has identified as "Hot Spots." Most illegal dumping occurs in the southwest portion of City. These Hot Spots have been identified through the City's solid waste management Hansen System, which is a computer software tracking database of customer service requests and work orders. The Hot Spots are identified by street and location in each of the

City's council districts (12 total), and the database is maintained by SWS. Each council district also has the opportunity to notify SWS of additional locations that can be deemed illegal dumping spots. Citizens can also notify SWS by calling the Illegal Dumping Hotline number - (404) 521-DUMP (3867) - to report illegal dumping activities.

4.6.2 Prevention/Enforcement Strategy (Existing Program)

Sections 130-2, 3, 4, 6, and 7 of the City of Atlanta's Solid Waste Ordinance prohibit illegal dumping of debris, uncontainerized garbage, litter, trash, solid waste, or uncontainerized yard trimmings upon streets, sidewalks, public places, public property, and public ROWs within the city. Section 130-12 of the Solid Waste Ordinance sets forth enforcement penalties for illegal dumping and violation of the Solid Waste Ordinance.

In August of 2004, the City of Atlanta expanded its Illegal Dumping Program to form partnerships and establish a new approach to combat illegal dumping. SWS will work in conjunction with the City of Atlanta Police Department (Quality of Life Program), the Department of Planning and Community Development Housing Code Compliance office, and the Atlanta City Council to eradicate illegal dumping.

The City's Illegal Dumping Program has four primary components:

1. **Education.** The program involves educating citizens on the definition of illegal dumping, how to report illegal dumping, how to distinguish illegal dumping from unscheduled bulk rubbish or yard trimmings piles, and procedures for proper disposal and scheduling for all solid waste services. Many of these efforts are conducted through the Solid Waste Education and Enforcement Team (S.W.E.E.T.). S.W.E.E.T. collaborates with the various community and neighborhood associations to form a High Intensity Visibility Enforcement (HIVE) operation. A HIVE operation is discussed in more detail in Section 4.6.2.2.
2. **Inter-agency Partnerships.** The goal of this program is to aggressively attack illegal dumping by forming partnerships within the City of Atlanta's departments and programs such as the Department of Housing Code Enforcement, Atlanta Police Department Quality of Life Officers, and the Weed and Seed Program. All of the departments' resources are combined to work efficiently and provide a more visible enforcement infrastructure.
3. **Community Partnerships.** In this program, working relationships and partnerships are established with community and neighborhood associations to develop effective communication and participation with regard to the improvement, cleanliness, and beautification of places where they work, live, and play. These efforts will be accomplished through collaborative efforts such as the HIVE operation and neighborhood community cleanups.
4. **Enforcement, Fines, and Court.** This program focuses on enforcing and expanding the Solid Waste Ordinance to include increased fines for illegal dumping, the establishment of citizen rewards, and the creation of an environmental crimes unit, as well as environmental court.

4.6.2.1 Illegal Dumping Hotline

An Illegal Dumping Hotline number – (404) 521-DUMP (3867) – has been established to assist citizens in reporting illegal dumping actions. The hotline provides a quick response to illegal dumping and also provides education on alternative disposal options. The hotline also assists the City's Customer Service Division in distinguishing between unscheduled bulk rubbish pickups and illegal dumping sites.

When a citizen calls the City's Illegal Dumping Hotline, three options are provided:

1. If the citizen is calling to report illegal dumping in progress, the citizen is asked to provide detailed information on the exact location, cross streets or intersections, description of any vehicles involved, and a description of the persons involved in the illegal dumping incident. The call is received at the Chester Avenue substation, which provides 24-hour staffing. The employee on duty will then contact the Atlanta Police Department, Quality of Life Officer, and the Code Enforcement Officer assigned to that area.
2. If the citizen is calling to report illegal dumping which has already occurred, the citizen is connected to the Customer Service Division of the DPW at (404) 330-6333, and is asked to provide detailed information on the address, cross streets or intersections, and the type of debris (i.e., bulk rubbish, yard trimmings, or household garbage) that was dumped.
3. If the citizen is calling with questions pertaining to illegal dumping, bulk rubbish, yard trimmings, or disposal locations, the citizen is forwarded to an automated message which provides locations and telephone numbers for disposal options (i.e., area landfills and drop-off points).

As a safety precaution, the City informs residents to never attempt to confront an individual or persons they suspect or know are engaging in illegal dumping.

4.6.2.2 Solid Waste Education and Enforcement Team (S.W.E.E.T.)

S.W.E.E.T. collaborates with the various community and neighborhood associations to form a HIVE operation for an area in that neighborhood that requires education and enforcement on illegal dumping. This partnership proactively identifies and addresses specific needs with regard to illegal dumping and general solid waste management concerns in that area. The HIVE operation operates for 30 days in each formed area, with the first 2 weeks devoted to introductory meetings in the neighborhood. The meeting provides educational materials to the neighborhood and explains such items as courtesy tickets and proper disposal methods. The third week of the operation consists of illegal dumping cleanup and pickup of scheduled bulk rubbish and yard trimmings. The fourth week involves handing out citations in the area, if necessary, and culminates in a final major community cleanup over the weekend.

4.6.2.3 Program Monitoring

The illegal dumping program monitors the following to determine the effectiveness of the program:

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- The number of bulk rubbish piles scheduled and picked up, along with illegal dumping “Hot Spots” eradicated in each area during the HIVE process.
 - The total amount of revenue generated through fines, as well as the number of people prosecuted for illegal dumping.
 - The overall appearance of the City through the eyes of the DPW, as well as the citizens of Atlanta.

4.7 Contingency Strategies

In the event of a waste-generating disaster or if the primary collection option becomes interrupted, the City of Atlanta has Emergency Response Standard Operating Procedures in place for the DPW. The Emergency Response Plan outlines the Department’s responsibilities during an emergency, the level of interaction with other agencies, and the emergency communication and protocol guidelines and procedures in place. The DPW, which houses the SWS, is the lead agency to provide services to restore the City to normal operations following an emergency. The basic mission of the Department is to “maintain the infrastructure and physical environment” in the City of Atlanta. The following sections provide more detail on the contingency strategies for the various collection services the City provides.

4.7.1 Solid Waste Collection

In the event that the City’s primary solid waste collection service becomes interrupted or if a disaster generates a significant increase in the volume of waste:

- The City can utilize weekends to collect increased volumes of waste.
- The City can increase the amount of overtime for its workers, add multiple shifts, and hire temporary/seasonal labor to handle increased collection service.
- The City currently maintains backup equipment to handle emergency collection. In the event that the equipment/vehicles break down, or additional equipment/vehicles are needed, the City has emergency funds to rent replacements.
- Private collection entities can be contracted to help handle the increase in waste or interruption in waste collection service.

4.7.2 Recycling Collection

In the event that the City’s primary curbside recycling collection service becomes interrupted or if a disaster generates a significant increase in the volume of recyclables:

- The City can use other private recycling companies to handle the increase or interruption in recycling service.
- The City can use overtime pay for its workers and its own equipment to help support the collection of recyclables.

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- The City can use its own vehicles to collect and deliver recyclables to MRFs in metro Atlanta.

4.7.3 Yard Trimmings Collection

In the event that the City's primary yard trimmings collection service becomes interrupted or if a disaster generates a significant increase in the volume of yard trimmings:

- The City has adequate space to stockpile yard trimmings.
- The City can acquire manpower and equipment to ship processed yard trimmings directly to end-users.
- The City has agreements in place to contract out chipping and grinding if the City's equipment fails. The City can also initiate emergency contracts for chipping and grinding, if necessary.
- The City can use overtime pay for its workers and hire temporary/seasonal labor to provide additional collection.
- The City has enough spare equipment and fleet vehicles to continue collection. In the event that the equipment/vehicles break down, or additional equipment/vehicles are needed, the City has emergency funds to rent replacements.

4.7.4 Non-Traditional Collection Services

In the event that the City's primary City building collection and beautification services become interrupted or if a disaster generates a significant increase in the volume of waste that these services handle:

- The City can use overtime pay for its workers to provide additional collection.
- The City has access to backup equipment to handle increased collection or interruptions in service.
- The City has emergency funds to purchase replacements.

4.8 Needs and Goals

The City believes that its current waste collection services are adequate for the present and future needs of the community; however, the City also believes that several operational efficiency improvements are needed. These improvements will help provide cost-effective and responsive services to the citizens of Atlanta. These improvements were a result of analyzing Best-In-Class benchmarks. The City compared similar services provided by other jurisdictions (both private and public) to determine the best, economically feasible programs for solid waste management. These operational improvements will help the City meet its waste reduction goals and will provide an effective and affordable collection system for the 10-year planning period.

4.8.1 Garbage Collection Programs

The following are proposed garbage collection programs under consideration by the City.

4.8.1.1 Education and Compliance – Curbside Garbage Set-Out Limits (New Program)

During the benchmarking study, the City observed residents of several single- and multi-family units setting out large amounts of garbage at the curb in violation of the set-out limits established in the City's Solid Waste Ordinance, Section 130-37. The City notes, however, that the set-out limits established in the ordinance itself are very high compared to requirements by most cities and private haulers in the U.S. Bulky waste items were also observed to be mixed with yard waste. Therefore, the City will:

- Review the need to establish new, lower set-out limits.
- Educate residents on adhering to proper set-out limits.
- Take necessary enforcement actions to ensure compliance with the set-out limits.

Proper adherence to established set-out limits allows the City to work more efficiently in collecting waste. Unnecessary labor is expended by workers who are forced to collect extra garbage that is not containerized. The City's goal is to encourage compliance while ensuring customer satisfaction, controlling litter, and preventing illegal dumping.

4.8.1.2 Collection Productivity and Operational Efficiency (New Program)

The benchmarking study also assessed the City's collection productivity and operational efficiency. Recommended improvements that the City will consider or has already implemented include:

- Establishing a task pay system for City collection employees to provide incentive-based pay for performance. An example of a task pay system for refuse collection would pay a worker to complete collection of a specific number of houses for a specifically assigned route.
- Using dedicated collection crews working either four 10-hour days or five 8-hour days each week to achieve higher productivity
- Continuing the current financial management transition that SWS is undergoing, in order to help align costing data more accurately with the services provided.

The City is currently performing a cost of service and rate analysis study to determine fair and reasonable rates for the various services it provides. The study will be utilized in conjunction with this SWMP to help determine the true costs necessary to cover the new programs in this SWMP. The study will determine how the City can adequately fund these new programs while providing fair rates.

4.8.1.3 Fleet Maintenance (Enhanced Program)

The benchmarking and UPS studies observed that the City of Atlanta's solid waste collection fleet is aging and that many vehicles are in need of replacement. The studies also recommended that a better preventative maintenance program, pre- and post-trip inspection program, and reparative schedule be implemented. The City is currently in the process of initiating a vehicle maintenance and replacement program that will help reduce overall costs. A higher up-front capital outlay will be required for a vehicle fleet maintenance and replacement program; however, this initial investment will translate into more efficient operations and savings in maintenance and reparative costs in the long-term.

The City's recent reorganization of the Motor Transport Division's procedures and responsibilities and the use of transfer stations, has improved the efficiency and reduced the maintenance and wear of its collection vehicles. The use of more widely distributed transfer stations has reduced the City's transportation and fuel costs, reduced its vehicle maintenance and wear, and has increased the City's productivity and efficiency.

4.8.1.4 Commercial Collection (New Program)

The City's Commercial Solid Waste Assessment Report was an initial preliminary assessment of commercial solid waste in the City. Another more detailed report will be developed by the City to gather more data and information. This report will help the City identify feasible initiatives for implementing collection and recycling programs at commercial establishments.

The City will consider the feasibility of offering waste collection service to non-residential customers. Although non-residential and non-public waste collection is currently handled by private hauling companies, the City will determine if more cost-competitive, enhanced customer service and more efficient collection can be provided by the City to non-residential customers.

4.8.1.5 Improved Overall Route Balance (New Program)

The City will also evaluate the current collection routes as part of a long-term system assessment. The City will utilize geographic information systems (GIS) and routing software to better plan the collection routes. Routing software will allow the City to improve the overall route balance and allow the flexibility of making specific routing improvements. Route balancing will allow the City to provide and operate collection services more efficiently for its customers.

4.8.2 Recycling Collection Programs

The new programs that the City plans to implement for recycling collection are discussed in Section 3.5.3, Recycling Programs.

4.8.3 Yard Trimmings Collection Programs

Additional programs for yard trimmings are discussed in Sections 3.5.3.8, 3.5.3.9, and 3.5.3.10.

4.8.3.1 Increased Frequency of Yard Trimmings Pickup (New Program)

The City will consider evaluating an increase in yard trimmings pickup frequency from the current bi-weekly schedule to once a week. However, the City does not have the equipment and labor to increase pickup frequency. The City would require additional funding to accomplish this, and will evaluate purchasing additional equipment and possibly hiring temporary/seasonal labor (due to seasonal increases in yard trimmings generation).

Better adherence to yard trimmings set-out limits established in the Solid Waste Ordinance will also help the City in accommodating a once a week pickup frequency, since the City will be able to collect yard trimmings more efficiently. When yard trimmings are uncontainerized or are larger than the required collection dimensions, workers must take time to ensure these yard trimmings can fit into the packer trucks. Through education,

enforcement, and re-evaluation of the set-out limits established in the Solid Waste Ordinance, the City will ensure that compliance with set-out limits is achieved. These efforts are discussed below in Section 4.8.3.2, Education and Compliance – Yard Trimmings Set-Out Limits.

4.8.3.2 Education and Compliance – Yard Trimmings Set-Out Limits (New Program)

In conjunction with the program outlined in Section 4.8.1.1, Education and Compliance – Curbside Garbage Set-Out Limits, the City will re-evaluate the current set-out limits established for yard trimmings in the Solid Waste Ordinance, and focus on educating residents and taking enforcement actions, if necessary. The City will also ensure that residents separate bulky waste from bulky yard trimmings. The City's goal is to encourage compliance while ensuring customer satisfaction, controlling litter, and preventing illegal dumping.

4.8.4 Non-Traditional Collection Services Program

The City's cost of service and rate analysis study that will be performed under the Collection Productivity and Operational Efficiency Program, as described above in Section 4.8.1.2, Collection Productivity and Operational Efficiency, will also develop fair and reasonable rates among the various City beautification and City building services. For City building collection and City beautification services, this study is especially important in determining if these services are being adequately funded by the appropriate funding mechanisms.

4.8.5 Illegal Dumping/Littering Programs

The following are proposed garbage collection programs under consideration by the City.

4.8.5.1 Expand Illegal Dumping/Littering Program (Enhanced Program)

For the 10-year planning period, the City of Atlanta plans to expand the illegal dumping program to include these three components:

- S.W.E.E.T. and the Trash Troopers program will be expanded to cover more areas in the City on a daily basis.
- An Environmental Crimes Unit will be established under SWS with the sole purpose of investigating and arresting illegal dumpers.
- An Environmental Court will be established to prosecute persons guilty of environmental and illegal dumping offenses. The environmental court will support the issuance of fines and penalties, and will uphold the strictness with which they are levied against violators.

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